

REMARKS/ARGUMENTS

1.) Claim Amendments

The Applicants have amended claims 5, 10 and 16, and cancelled claims 32-33. Accordingly, claims 2-8, 10-22 and 24-30 remain pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Examiner Objections – Drawings

a.) The Examiner stated that the drawings submitted in response to the prior Office Action are acceptable, but objected to the drawings as not showing every feature of the invention specified in the claims. The Examiner stated that “the step or means for cyclically rotating the inverse discrete Fourier transformed/inverse Fast Fourier Transformed sequence for the first antenna, as recited in the base claims, must be shown or the feature(s) canceled from the claim(s).” (emphasis added) The Applicants traverse the objection.

The Examiner misstates the claimed invention. The “base” (*i.e.*, independent) claims do not recite a “first antenna,” but only “at least two antennas.” The Examiner is apparently reading this as first and second antennas and equating them to antennas x1 and x2 in Figure 3. The “at least two antennas” recited in the claims, however, actually read on antennas x2 and x3 in Figure 3. From that perspective, every element recited in the claims is illustrated in the figures. In contrast, the Examiner's perspective is viewing Figure 3 and expecting every element therein to be recited in the base claims – such is not required because the claims are open-ended. Whereas the claims are open-ended, however, they will read on an embodiment such as illustrated in Figure 3 that also includes an antenna x1 and associated antenna branch in which no cyclical rotation is performed. The Applicants, therefore, traverse the Examiner's objection to the drawings.

b.) The Examiner stated that Figure 1 should be designated as prior art. Applicant submits herewith an amended drawing sheet for Figure 1, including a “Prior Art” legend.

3.) Examiner Objections – Specification

a.) The Examiner objected to the specification as failing to provide proper antecedent basis for the claimed subject matter. The Examiner's objection, however, is based on a misreading of the claimed subject matter. As noted *supra*, the "base" (*i.e.*, independent) claims do not recite a "first antenna," but only "at least two antennas." The Examiner is apparently reading this as first and second antennas and equating them to antennas x1 and x2 in Figure 3. The "at least two antennas" recited in the claims, however, actually read on antennas x2 and x3 in Figure 3. From that perspective, every element recited in the claims is illustrated in the figures and described in the specification. The Applicants, therefore, traverse the Examiner's objection to the specification.

b.) The Examiner noted that the word "to" should be inserted after "prior" at page 22, line 17. The Applicants have included herewith an amendment to the specification to correct the typographical error.

4.) Examiner Objections – Claims

a.) The Examiner objected to claims 2-8, 10-22 and 32, stating that they should be recited in the "active tense." Although the suggested language style may be preferable, there is no statutory basis for the Examiner's objection to the style chosen by Applicants and, therefore, the Applicants elect not to so amend the claims.

b.) The Examiner objected to claim 5, stating that "predetermined" should be inserted before "step." The Applicants have amended claim 5 in accordance with the Examiner's suggestion.

c.) The Examiner objected to the wording of claim 10. The Applicants have amended claim 10 in accordance with the Examiner's suggestion.

d.) The Examiner also objected to the wording of claims 16, stating that the limitations appear to be directed more to method type limitations than apparatus/system type limitations. Although it does not appear that there is a statutory basis for the Examiner's objection, the Applicants have amended claim 16 to make it clear that the recited operations are performed in the wireless communications system.

5.) Double Patenting

The Examiner objected to claims 32 and 33 as being substantial duplicates of claims 17 and 25. The Applicants have cancelled claims 32 and 33 and, therefore, the Examiner's objection is moot.

6.) Allowable Subject Matter

The Applicants thank the Examiner for the allowance of claims 24-30. The Examiner also indicated that claims 2-8 and 10-22 would be allowable if amended to overcome the Examiner's stated objections. The Applicants have made the amendments suggested or requested by the Examiner, with the exceptions noted *supra* as to amendments not desired by Applicants and not required in order to comply with the patent statute and regulations. Accordingly, the Applicants believe all pending claims are now in condition for allowance.

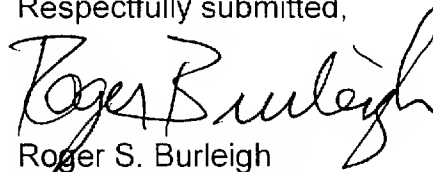
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CONCLUSION

In view of the foregoing amendments and remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 2-8, 10-22 and 24-30.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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Date: February 8, 2006

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